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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/541,094	06/29/2005	Daisuke Kuroda	SON-2908	6119

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EXAMINER	
GREECE, JAMES R	

ART UNIT	PAPER NUMBER
2873	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/541,094	KURODA ET AL.	
	Examiner	Art Unit	
	JAMES R. GREECE	2873	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 June 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,9-13,17 and 21-25* is/are rejected.

7)☒ Claim(s) *6-8,14-16,18-20 and 26-28* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *29 June 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *7/11/2007, 3/29/2006, 6/29/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Detailed Action

Applicant cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Status of the Application

Claims 1-28 are pending in this application

If the applicant is aware of any prior art or any other co-pending application not already of record, he/she is reminded of his/her duty under 37 CFR 1.56 to disclose the same.

Drawings

There are no objections to applicant's drawings at this time.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Nanjo (JP2000-227548A of record).

In regard to claims 1-4, Nanjo teaches the following limitations as claimed:

A zoom lens of an inner focus type having four or five lens groups, (for details see at least figure 1) including at least a first lens group having positive refractive power, (for details see at least figure 1, GR1) a second lens group having negative refractive power, (for details see at least figure 1, GR2) which is movable in an optical axis direction mainly for zooming varying power, (for details see at least GR2) a third lens group having positive refractive power , (for

details see at least GR3) and a fourth lens group having positive or negative refractive power, (for details see at least GR4) which is movable in the optical axis direction for correcting fluctuations in focal position during zooming and for focusing, (for details see at least GR4) which lens groups are arrayed in order from an object side, (for details see at least figure 1) characterized in that: said first lens group comprises at least a concave lens [which is arrayed nearest to the object side], a convex lens [which is arrayed second- near to the object side], and a triple- cemented lens [and said triple-cemented lens comprises] in which a lens made of special low- dispersion glass [cemented with another lenses] is sandwiched in the middle, which lenses are arrayed [at the object side and an image side] in order from the object side (for details see at least GR1).

Said triple-cemented lens in said first lens group includes a first concave lens A1, a convex lens A2 formed of special low-dispersion glass and a second concave lens A3, which lenses are arrayed in order from the object side, and said first concave lens A1 and said convex lens A2 (for details see at least GR1 and paragraph 0022) are formed of materials satisfying the following two conditional formulae (1) and (2):

(1)nl - n2 > 0.3

(2)[vl - v2] > 4

wherein refractive indexes at a line C, a line d, a line F and a line g are nC, nd, nF and ng, respectively, and nx is a refractive index nd at the line d of a lens Ax (an xth lens from the object side among the triple-cemented lens, hereinafter, this is the same), and vx is an Abbe number vd = (nd - 1) / (nF - nC) at the line d of the lens Ax (for details see at least drawing 1 and tables for n and v included in the Japanese version of the patent document.).

Said triple-cemented lens in said first lens group includes a first concave lens A 1, a convex lens A2 formed of special low-dispersion glass and a second concave lens A3, which lenses are arrayed in order from the object side, and said convex lens A2 and said second concave lens A3 are formed of materials satisfying the following three conditional formulae (3), (4), and (5):

(3)1n2 - n31 0.1

(4) v23 > 80

(5) AP23 > 0.03

wherein refractive indexes at a line C, a line d, a line F and a line g are nC, nd, nF and ng, respectively, and nx is a refractive index nd at the line d of a lens Ax (an xth lens from the object side among the triple-cemented lens, hereinafter, this is the same), vx is an Abbe number vd = (nd - 1) / (nF - nC) at the line d of the lens Ax, and Px is a partial dispersion ratio P = (ng - nF) / (nF - nC) of the lens Ax (for details see at least drawing 1 and tables for n and v included in the Japanese version of the patent document.).

The triple-cemented lens in said first lens group includes a first concave lens A1, a convex lens A2 formed of special low-dispersion glass and a second concave lens A3, which lenses are arrayed in order from the object side, and said convex lens A2 (for details see at least figure 1 and paragraph 0022) and said second concave lens A3 are formed of materials satisfying the following three conditional formulae (3), (4), and (5):

(3)1n2 - n3l 0.1

(4) v23 > 80

(5) AP23 > 0.03

wherein refractive indexes at a line C, a line d, a line F and a line g are nC, nd, nF and ng, respectively, and nx is a refractive index nd at the line d of a lens Ax (an xth lens from the object side among the triple-cemented lens, hereinafter, this is the same), vx is an Abbe number vd = (nd - 1) / (nF - nC) at the line d of the lens Ax, and Px is a partial dispersion ratio P = (ng - nF) / (nF - nC) of the lens Ax (for details see at least drawing 1 and tables for n and v included in the Japanese version of the patent document.).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nanjo (JP2000-227548A of record) as applied to claim 1 above, and further in view of Nanjo (JP2000-105336A of record).

In regard to claim 5, Nanjo '548 does not explicitly disclose the following combination of elements as claimed:

said first lens group comprises a first lens of a concave meniscus lens whose convex surface faces the object side, a second lens of a convex lens, a triple-cemented lens made of a third lens of a concave meniscus lens whose convex surface faces the object side, a fourth lens of a convex lens and a fifth lens of a concave meniscus lens whose concave surface faces the object side, and a sixth lens of a convex lens, which lenses are arrayed in order from the object side.

However, the number of elements that constitute a lens group and the order of such lenses in terms of refractive power are features which would be obvious to one having ordinary skill in the art of optical engineering at the time the invention was made. This arrangement as claimed by the applicant is disclosed in the embodiments of Nanjo '336 in at least figures 1 or 5. It would have been obvious for one having ordinary skill in the art at the time the invention was made to modify the device of Nanjo 548 to include the extra lens components as taught by Nanjo '336 for the predictable result of providing a zoom lens system particularly designed for optimal performance for a particular application.

5. Claim 9, 10-12, 13, 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nanjo (JP2000-105336A of record) and further in view of Nanjo (JP2000-227548A of record).

In regard to claim 9, Nanjo discloses the following as claimed:

A zoom lens of an inner focus type including a first lens group having positive refractive power, a second lens group having negative refractive power, which is movable in an optical axis direction mainly for zooming (varying power), a third lens group having positive refractive power, a fourth lens group having negative refractive power, which is movable in the optical axis direction for correcting fluctuations in focal position during zooming and for focusing, and a fifth lens group having positive refractive power, which lens groups are arrayed in order from an object side, characterized in that (for details see at least figures 1 and 5, groups 2 and 4).

In regard to claim 5, Nanjo '336 does not explicitly disclose the following combination of elements as claimed:

said first lens group comprises [at least] a concave lens [which is arrayed nearest to the object side], a convex lens [which is arrayed second- near to the object side], and a triple-cemented lens[, and said triple-cemented lens comprises] in which a lens made of special low-dispersion glass is sandwiched in the middle, which lenses are arrayed in order from the object side [cemented with another lenses arrayed at the object side and an image side]

However, Nanjo '548 discloses this limitation in at least figure 1, group 1, and paragraph 0022.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Nanjo '336 to include the triple cemented lens group as taught by Nanjo '548 for the predictable result of solving manufacturing problems associated with zoom ratio being made high in magnification.

In regard to claims 10-12, Nanjo '336 does not explicitly disclose the following combination of elements as claimed:

Said triple-cemented lens in said first lens group includes a first concave lens A1, a convex lens A2 formed of special low-dispersion glass and a second concave lens A3, which lenses are arrayed in order from the object side, and said first concave lens A1 and said convex lens A2 are formed of materials satisfying the following two conditional formulae (1) and (2):

(1)nl - n2 > 0.3

(2)[vl - v2] > 4

wherein refractive indexes at a line C, a line d, a line F and a line g are nC, nd, nF and ng, respectively, and nx is a refractive index nd at the line d of a lens Ax (an xth lens from the object

side among the triple-cemented lens, hereinafter, this is the same), and vx is an Abbe number vd = (nd - 1) / (nF - nC) at the line d of the lens Ax.

Said triple-cemented lens in said first lens group includes a first concave lens A 1, a convex lens A2 formed of special low-dispersion glass and a second concave lens A3, which lenses are arrayed in order from the object side, and said convex lens A2 and said second concave lens A3 are formed of materials satisfying the following three conditional formulae (3), (4), and (5):

(3)1n2 - n31 0.1

(4) v23 > 80

(5) AP23 > 0.03

wherein refractive indexes at a line C, a line d, a line F and a line g are nC, nd, nF and ng, respectively, and nx is a refractive index nd at the line d of a lens Ax (an xth lens from the object side among the triple-cemented lens, hereinafter, this is the same), vx is an Abbe number vd = (nd - 1) / (nF - nC) at the line d of the lens Ax, and Px is a partial dispersion ratio P = (ng - nF) / (nF - nC) of the lens Ax

The triple-cemented lens in said first lens group includes a first concave lens A1, a convex lens A2 formed of special low-dispersion glass and a second concave lens A3, which lenses are arrayed in order from the object side, and said convex lens A2 and said second concave lens A3 are formed of materials satisfying the following three conditional formulae (3), (4), and (5):

(3) $|n2 - n3| < 0.1$

(4) v23 > 80

(5) AP23 > 0.03

wherein refractive indexes at a line C, a line d, a line F and a line g are nC, nd, nF and ng, respectively, and nx is a refractive index nd at the line d of a lens Ax (an xth lens from the object side among the triple-cemented lens, hereinafter, this is the same), vx is an Abbe number vd = (nd - 1) / (nF - nC) at the line d of the lens Ax, and Px is a partial dispersion ratio P = (ng - nF) / (nF - nC) of the lens Ax (for details see at least drawing 1 and tables for n and v included in the Japanese version of the patent document.).

However Nanjo '548 discloses these limitations in at least drawing 1, paragraph 0022 and tables for n and v included in the Japanese version of the patent document.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Nanjo '336 to fulfill the above cited numerical limitations as taught by Nanjo '548 for the predictable result of solving manufacturing problems associated with zoom ratio being made high in magnification.

In regard to claim 13, Nanjo '336 further discloses the following combination of elements as claimed:

said first lens group comprises a first lens of a concave meniscus lens whose convex surface faces the object side, a second lens of a convex lens, a third lens of a concave meniscus lens whose convex surface faces the object side, a fourth lens L4 of a convex lens, which lenses are arrayed in order from the object side (for details see figure 1 and 5, Nanjo '336)

In regard to claim 13, Nanjo '336 does not explicitly disclose the following as claimed:

a triple- cemented lens made of a fifth lens of a concave meniscus lens whose convex surface faces the object side, a sixth lens of a convex lens and a seventh lens of a concave meniscus lens whose concave surface faces the object side, and a sixth lens of a convex lens

However Nanjo '548 discloses this limitation in at least figure 1, group 1.

The number of elements that constitute a lens group and the order of such lenses in terms of refractive power are features which would be obvious to one having ordinary skill in the art of optical engineering at the time the invention was made. This arrangement as claimed by the applicant is disclosed in the embodiments of Nanjo '336 in at least figures 1 or 5. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Nanjo '336 to include the three lens cemented fixture as taught by Nanjo '548 for the predictable result of solving manufacturing problems associated with zoom ratio being made high in magnification.

In regard to claim 17, Nanjo '336 discloses the following combination of elements as claimed:

first lens group comprises a first lens of a concave meniscus lens whose convex surface faces the object side, a second lens of a convex lens, a cemented lens made of a third lens L3 of a concave meniscus lens whose convex surface faces the object side and a fourth lens of a convex lens, and an eighth lens of a convex lens, which lenses are arrayed in order from the object side

In regard to claim 17, Nanjo 336 does not explicitly disclose the following as claimed:

a triple-cemented lens made of a fifth lens of a concave meniscus lens whose convex surface faces the object side, a sixth lens of a convex lens and a seventh lens of a concave meniscus lens whose concave surface faces the object side,

However Nanjo '548 teaches this limitation in at least figure 1.

The number of elements that constitute a lens group and the order of such lenses in terms of refractive power are features which would be obvious to one having ordinary skill in the art of optical engineering at the time the invention was made. This arrangement as claimed by the applicant is disclosed in the embodiments of Nanjo '336 in at least figures 1 or 5. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Nanjo '336 to include the three lens cemented fixture as taught by Nanjo '548 for the predictable result of solving manufacturing problems associated with zoom ratio being made high in magnification.

6. Claims 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Azusawa (USPAT 5,905,530 of record) and further in view of Nanjo (JP2000-227548A of record).

In regard to claim 21 Azusawa discloses the following as claimed.

An imaging apparatus having a zoom lens, imaging means for transforming an image taken in by said zoom lens to an electrical image signal, and image control means, characterized in that: (for details see at least figures 1, 2, 12) said image control means, referring to a transformation coordinate coefficient provided in advance according to a variable power rate by said zoom lens, moves points on the image which are defined by the image signal formed by said imaging means to form a new image signal subjected to coordinate transformation and to output said new image signal (for details see at least figures 1, 2, 12).

In regard to claim 21 Azusawa does not explicitly disclose the following as claimed:

said zoom lens of an inner focus type having four or five lens groups, comprises at least a first lens group having positive refractive power, a second lens group having negative refractive power, which is movable in an optical axis direction mainly for zooming (varying power), a third lens group having positive refractive power, and a fourth lens group having positive or negative refractive power, which is movable in the optical axis direction for correcting fluctuations in focal position during zooming and for focusing, which lens groups are arrayed in order from an object side, and said first lens group comprises at least a concave lens [which is arrayed nearest to the object side], a convex lens [which is arrayed second- near to the object side], and a triple-cemented lens[, and said triple-cemented lens comprises] in which a lens made of special low-dispersion glass is sandwiched in the middle, which lenses are arrayed in order from the object side [cemented with another lenses arrayed at the object side and an image side]

However Nanjo '548 discloses these limitations in at least figure 1 and paragraph 0022.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Azusawa to include the lens system as disclosed by Nanjo since Azusawa discloses a similar system to that disclosed by Nanjo and further the combination would provide the predictable result of an imaging apparatus with a significantly large wide angle and telephotographic area that includes a miniaturized lens system.

In regard to claims 22-24 Azusawa does not explicitly disclose the following as claimed:

Said triple-cemented lens in said first lens group includes a first concave lens A1, a convex lens A2 formed of special low-dispersion glass and a second concave lens A3, which

lenses are arrayed in order from the object side, and said first concave lens A1 and said convex lens A2 are formed of materials satisfying the following two conditional formulae (1) and (2):

(1)nl - n2 > 0.3

(2)[vl - v2] > 4

wherein refractive indexes at a line C, a line d, a line F and a line g are nC, nd, nF and ng, respectively, and nx is a refractive index nd at the line d of a lens Ax (an xth lens from the object side among the triple-cemented lens, hereinafter, this is the same), and vx is an Abbe number vd = (nd - 1) / (nF - nC) at the line d of the lens Ax.

Said triple-cemented lens in said first lens group includes a first concave lens A 1, a convex lens A2 formed of special low-dispersion glass and a second concave lens A3, which lenses are arrayed in order from the object side, and said convex lens A2 and said second concave lens A3 are formed of materials satisfying the following three conditional formulae (3), (4), and (5):

(3) |n2 - n3|< 0.1

(4) v23 > 80

(5) AP23 > 0.03

wherein refractive indexes at a line C, a line d, a line F and a line g are nC, nd, nF and ng, respectively, and nx is a refractive index nd at the line d of a lens Ax (an xth lens from the object side among the triple-cemented lens, hereinafter, this is the same), vx is an Abbe number vd = (nd - 1) / (nF - nC) at the line d of the lens Ax, and Px is a partial dispersion ratio P = (ng - nF) / (nF - nC) of the lens Ax

The triple-cemented lens in said first lens group includes a first concave lens A1, a convex lens A2 formed of special low-dispersion glass and a second concave lens A3, which lenses are arrayed in order from the object side, and said convex lens A2 and said second concave lens A3 are formed of materials satisfying the following three conditional formulae (3), (4), and (5):

(3) $|n2 - n3| < 0.1$

(4) $v23 > 80$

(5) $AP23 > 0.03$

wherein refractive indexes at a line C, a line d, a line F and a line g are nC, nd, nF and ng, respectively, and nx is a refractive index nd at the line d of a lens Ax (an xth lens from the object side among the triple-cemented lens, hereinafter, this is the same), vx is an Abbe number $vd = (nd - 1) / (nF - nC)$ at the line d of the lens Ax, and Px is a partial dispersion ratio $P = (ng - nF) / (nF - nC)$ of the lens Ax (for details see at least drawing 1 and tables for n and v included in the Japanese version of the patent document.).

However Nanjo '548 discloses these limitations in at least drawing 1, paragraph 0022 and tables for n and v included in the Japanese version of the patent document.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device of Azusawa to include the lens system conforming to the above cited numerical limitations as disclosed by Nanjo since Azusawa discloses a similar system to that disclosed by Nanjo '548 and further the combination would provide the predictable result of an imaging apparatus with a significantly large wide angle and telephotographic area that includes a miniaturized lens system.

7. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Azusawa (USPAT 5,905,530 of record) in view of Nanjo (JP2000-227548A of record) as applied to claim 21 above, and further in view of Nanjo (JP2000-105336A of record).

In regard to claim 25, Azusawa in view of Nanjo '548 does not explicitly disclose the following as claimed:

said first lens group comprises a first lens of a concave meniscus lens whose convex surface faces the object side, a second lens of a convex lens, a triple-cemented lens made of a third lens of a concave meniscus lens whose convex surface faces the object side, a fourth lens of a convex lens and a fifth lens of a concave meniscus lens whose concave surface faces the object side, and a sixth lens of a convex lens, which lenses are arrayed in order from the object side

The number of elements that constitute a lens group and the order of such lenses in terms of refractive power are features which would be obvious to one having ordinary skill in the art of optical engineering at the time the invention was made. This arrangement as claimed by the applicant is disclosed in the embodiments of Nanjo '336 in at least figures 1 or 5. It would have been obvious for one having ordinary skill in the art at the time the invention was made to modify the device of Azusawa in view of Nanjo '548 to include the extra lens components as taught by Nanjo '336 for the predictable result of providing a zoom lens system particularly designed for optimal performance for a particular application.

Claim Objections

8. Claims 6-8, 14-16, 18-20, and 26-28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter: The prior art taken singularly or in combination fails to anticipate or fairly suggest the limitations of the independent claims, in such a manner that a rejection under 35 U.S.C. 102 or 103 would be proper.

10. In regard to dependent claims 6-8, 14-16, 18-20, and 26-28, the prior art taken either singly or in combination fails to anticipate or fairly suggest a zoom lens system combining the particular structural and numerical limitations recited in the claims together in combination with the totality of particular features/limitations recited therein.

Cited Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Tachihara USPAT 4,345,822 A is cited to show a zoom lens system in the art.

b. Suzuki USPAT 5,654,826 A is cited to show a zoom lens system in the art.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES R. GREECE whose telephone number is (571)272-3711. The examiner can normally be reached on M-Th 7:30-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Mack can be reached on 571-272-2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. R. G./
James R Greece
Examiner, Art Unit 2873
5/21/2008

/Joseph Martinez/
Patent Examiner, Art Unit 2873